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ABSTRACT

Data from a national survey were used to test a model representing the dynamics of newspaper reading behaviors. It was hypothesized that three types of constraints (structural constraints, transitional constraints, and self-constraints) would be present to various degrees in four types of newspaper readers: regular readers, regular nonreaders, past readers who had quit reading (droppers), and past nonreaders who had begun reading (adders). These four types of readers were present in a sample of 1,201 people surveyed during both the 1974 and the 1976 election campaigns. Operational indicators included education and income for structural constraints; age and residential, marital, and occupational changes for transitional constraints; and campaign interest, campaign activity, attention to public affairs, and political activity outside the campaign context for self-constraints. Overall, the constraints model held up well under testing. As predicted, structural constraints accounted for stable nonreading. Transitional constraints, particularly those associated with youth and mobility, predicted changes in readership status. Directional changes, as represented by the adders and droppers, were associated mainly with indicators of self-constraints. The data were also consistent with expectations that self-constraints would be a function of structural factors, the strongest indicators of readership status. (RL)

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NEWSPAPER READING IN LONGITUDINAL PERSPECTIVE:

BEYOND STRUCTURAL EXPLANATIONS

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Abstract

Three types of constraints on newspaper reading explain different behavior patterns over a two-year period. Stable non-readers are constrained by structural factors due to socioeconomic disadvantage, particularly low education. Those who change tend to be young adults undergoing life-cycle transitions such as changed residence. Transitional constraints are associated with changes both from reading a daily newspaper to non-reading ("droppers"), and the reverse ("adders"). The difference between these two opposing patterns of change lies in self-constraints, i.e. a lack of interest in public affairs news among the droppers.

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NEWSPAPER READING IN LONGITUDINAL PERSPECTIVE: BEYOND STRUCTURAL EXPLANATIONS

Although newspaper reading is in a period of historical decline, readership studies still find that there are many more readers than non-readers among adult Americans.[1] Reading a daily newspaper is a stronger norm than, say, voting, although it is less universal than watching television or driving a car. The sizable (and growing) minority who have not adopted this norm have been the focus of continuous attention from social scientists as well as a concerned newspaper industry.[2] Readership surveys have consistently located non-readers at the lower end of the socio-economic ladder; lack of resources and cognitive skills due to low education, and lack of social contacts and leisure time, are strong correlates of non-reading.[3]

Such static explanations, based on cross-sectional surveys, stress a conception of newspaper reading and non-reading as stable, habitual behaviors that are grounded in the social structure. And there is indeed evidence that, for many adult Americans, media use patterns are stable habits to which they have been socialized from childhood.[4] Youngsters in families of high socio-economic status learn to use mass media quite differently from those in disadvantaged homes, in particular being less likely to adopt newspaper reading as they grow up.[5]

But for many, newspaper reading is not a persistent, stable behavior throughout one's lifetime. As Tipton points out, there are "chronic" non-readers who are unlikely ever to take up the newspaper, but there are also many people who "sometimes" read newspapers.[6] Periodic fluctuation between reading and non-reading cannot be explained by stable individual differences growing out of socio-economic disadvantage. Understanding behavioral changes in newspaper reading requires more dynamic explanations than those which are implied by theories based on social stratification. The decline in the newspaper audience in recent decades has after all occurred despite the fact that educational levels in the U.S.

population have steadily risen, effectively removing the principal structural constraint against reading for most people.[7] The decisive behavior at stake is the dynamic process of acquiring or discontinuing the habit of daily newspaper reading, not the static condition of maintaining a habit of reading or non-reading.

The purpose of this paper, then, is to go beyond stable structural factors in a search for explanations of changes in newspaper reading behavior. Our basic assumption is that reading a daily newspaper is a communication behavior that entails some costs, and is limited by constraints operating within as well as upon the person. While we would not minimize systemic constraints, such as the relative unavailability of newspapers in developing countries,[8] we are mainly concerned here with individual-level factors that constrain a person from reading newspapers even in a country where they are highly available at very low cost. We also assume that the factors that explain change are different from those that explain the persistence of stable habits. Consequently we will examine panel data, which will allow us to analyze newspaper reading in longitudinal perspective rather than simply in terms of static correlates.

Varieties of Constraint

We propose that there are three major types of constraints affecting newspaper reading. First and most pervasive are structural constraints such as we have discussed above. We call these "structural" because they are determined largely by the person's disadvantageous location in the social structure and are generally beyond his personal control. Structural constraints manifest themselves in lack of resources to subscribe to a newspaper, lack of time to spend reading, lack of cognitive skills to understand newspaper stories, and so forth. Many among the poor, the elderly, the isolated, and the undereducated may never surpass these constraints and so should be expected to remain non-readers across the years.

But while structural constraints may be sufficient to explain non-reading, their absence is obviously not sufficient to account for reading. People who are free from structural constraints may nevertheless find that transitional constraints due to

life-cycle changes in their personal lives disrupt their newspaper reading habits. Although they are well-educated, today's young adults are especially likely to undergo many transitions such as changes in residence, or in marital or parental status, occupational changes like completing schooling or losing a job, and other life-cycle passages. To the extent that newspaper reading is integrated into one's daily habits, we should expect it to be disrupted by at least some of these transitions.

The importance of transitional constraints has been stressed by studies that focus on mobile young adults as potential newspaper subscribers.[9] But we assume here that, because newspaper subscription is especially sensitive to changes in residence and other basic elements of one's living situation, changes in personal status will be associated with change in two directions, both from non-reading to reading and vice versa. For example, a change in employment status (e.g. from unemployed to employed, or from employed to retired) transitionally affects both income and leisure time; a person with increased income but reduced leisure time should be more likely to change his newspaper habits than if his income and leisure time had remained stable, but the direction of change is not predictable. The emphasis in the research literature on structural correlates, and the general failure to distinguish theoretically between the different roles played by transitional and structural factors, is largely due to the lack of longitudinal studies in which changes could be examined separately from stable habits.

A third set of constraints can account for the direction of change, from or toward habitual newspaper reading. We will call these <u>self-constraints</u>, because they are to a considerable extent exercised by the person himself, on the basis of his interest in the services the newspaper provides. Newspapers publish a wide variety of content, especially on politics and local community affairs. A reader should presumably be attracted to at least some of that material; one who is not is a potential non-reader, who might well respond to a life-cycle transition by dropping the newspaper. Cross-sectional studies have found that interest and participation in community and political activities are rather strong correlates of newspaper reading.[10] Self-constraints are dispositional in nature, stable

individual differences in interest that should become manifest at points of transition in one's life. That is, just as we find stable readers more interested in political and community news than stable non-readers, we should also find those who change from non-reading to reading at a transition point more interested than those who change in the opposite direction.

Although for conceptual parallelism we are using the rather negative term "constraints" to refer to a person's dispositional lack of interest in news, it is obvious that there is also a positive, motivational element of attraction to newspaper content which is equally important in explaining reading.[11] Both the attraction and the constraint components of what we are calling self-constraints can be traced to structural and transitional antecedents. A person who for structural reasons has not been well educated, for example, may lack the base of information that would be necessary to comprehend and follow current events in the press. Or someone who has lived many years in one community may have built up a considerable interest in local activities and personalities; the absence of transitional constraint indirectly accounts for his attraction to the newspaper. But self-constraints are to a degree under the person's volitional control, whereas structural constraints are largely beyond the person's control and transitional constraints involve important life-cycle concerns that for the person overshadow the relatively minor matter of newspaper use.

We view self-constraint as a tertiary matter in comparison with other factors. Whether a person is interested enough in press content to read a daily newspaper is a question that may never arise for people who are structurally constrained, and is not the operative issue for those who find themselves temporarily beset with transitional constraints. Self-constraints should manifest themselves more strongly in relation to the amount or frequency of newspaper reading, to what is read, and to the attention given to similar content in other media, than to the simple question of whether or not one reads a daily newspaper at all.

Figure 1 about here

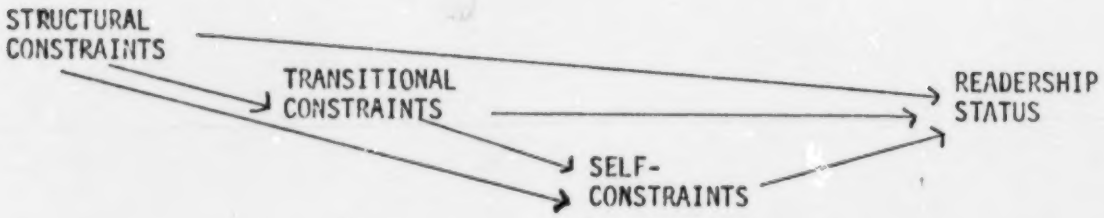

Figure 1. Theoretical Relationships Among Constraints on Newspaper Reading

Theoretical Relationships

Our theoretical structure, outlined in Figure 1, should not be mistaken for a simple linear model in which each constraint is an independent variable contributing to a unidimensional dependent variable, newspaper reading. The three types of constraint are inter-related, and their total effect is to differentiate the population into qualitatively different groups of people in terms of readership status.

As Figure 1 suggests, structural constraints are considered prior to other factors in our model. Not only do they have direct effects on readership status, accounting for chronic non-reading, they also affect the other types of constraint in some degree. For example, the economically and culturally disadvantaged are probably more subject than other people to such transitional constraints as changes in employment status. They are also less able to take an active role in politics and public affairs, which in turn ought to reduce their interest in political news.[12] Transitional disruptions can have a similar, if more temporary, negative impact on political activity. What might appear in correlational analyses to be direct effects of dispositional self-constraints could well prove instead to be indirect effects of structural or transitional constraints when the origins of the self-constraints are examined. The pervasiveness of structural constraints, in terms of theoretical priority, should nevertheless not overshadow the independent conceptual significance of transitional and self-constraints in explaining newspaper readership status.

The main focus of this paper is on <u>changes</u> in readership status. Why, over time, do some people drop the newspaper reading habit while others take it up? In the terms of our model, do different kinds of constraints operate on people who exhibit these opposing patterns of change? To address such questions, we need to compare four different readership status groups.

The first group, which should be accounted for by structural constraints, would be stable non-readers, who over time persist in <u>not</u> reading a daily newspaper because of chronic deficits that can be traced to lack of education, income, and the like. Among the remainder who are not structurally constrained, stable readers need to be

distinguished from groups that are unstable in readership status. Stable readers, i.e. those who over time continue to be habitual newspaper readers, should be relatively free of both transitional and self-constraints.

The two unstable groups should be differentiated from the two stable groups mainly by transitional constraints. That is, we expect transitional constraints to be associated with changes both to and away from newspaper reading. The difference between the two unstable groups should reside in self-constraints. When the person experiences a life-cycle transition that disrupts his daily habits in general, we should expect change in readership status; change from reading to non-reading ("dropping" the newspaper) should be associated with self-constraints, while those who change in the opposite direction ("adders") should not be self-constrained people.

Design and Measures

Our study is a secondary analysis of data from a national panel survey conducted by the Center for Political Studies (CPS) of the University of Michigan during the election campaigns of 1974 and 1976.[13] In each of those years, large representative cross-sectional samples of adult Americans were interviewed: 1,575 persons in 1974, and 2,248 in 1976. Of those, 1,201 were interviewed in both years; it is this subset that comprises the panel for our study.

Reading groups. Breakdown of the sample into the four readership status groups was based on a single question, asked in both 1974 and 1976: "Do you read a daily newspeper?" Those who answered "yes" at both times were classified as stable readers, and those who answered "no" both times as stable non-readers. The droppers were people who said "yes" in 1974 but "no" in 1976, while adders answered "no" in 1974 but "yes" in 1976. Approximately 91% of the panel respondents were asked this question and answered it yes or no, in both years; only these cases are classifiable for our analysis (N=1,096).

Table 1 about here

Table 1. Reading Daily Newspaper, 1974 vs. 1976

		1974: Do you read a daily newspaper? No	1974: Do you read a daily newspaper? Yes	
1976: Do you read a daily newspaper?	No	N=214 (19.5%) "Non-readers"	N=66 (6.0%) "Droppers"	N=280 (25.5%)
	Yes	N=90 (8.2%) "Adders"	N=726 (66.3%) "Readers"	N=816 (74.5%)
		N=304 (27.7%)	N=792 (72.3%)	N=1096 (100%)

Table 1 shows the number of cases in each group. Over the two-year period, the unstable adder and dropper groups are much smaller than the stable groups; because of the large total sample, even the smallest group (droppers, N=66) is sufficient in size to provide reasonably reliable statistical estimates. This panel probably underestimates the incidence of droppers in the total population.[14] In a traditional cross-sectional analysis, the adders and droppers would be mistakenly lumped with the stable groups, which would have obscured the operation of transitional constraints. That is, the adders would have been treated as non-readers in 1974 and then as readers in 1976, while the reverse would have been true for the droppers. Separating these two unstable groups from the others is essential to testing our model.

Structural constraints. Operational indicators of structural constraints are education and income. Education is the highest year the respondent completed in school (converted to a 10-point scale). Income is total income of the respondent's family (on a 20-point scale).

Transitional constraints. To locate life-cycle changes and instabilities, we created a number of dummy variables. Three of these represented change of status from 1974 to 1976 in the following respects: residential, marital, and occupational. All three were scored 0 if there was no change, and 1 if there was change in any direction. For example, change from married to divorced or vice-versa would both be scored 1, as would change from employed to unemployed or vice-versa. This procedure follows our theoretical assumption that it is change itself, not the specific direction of change, that accounts for unstable newspaper reading. (A majority of the marital status changes were from married to separated or divorced, and a majority of the employment changes were in the direction of losing "employed" status rather than gaining it.)

Our other indicator of transitional constraints was the person's stage in the life cycle. In general we assume (see above) that younger adults experience more life-cycle transitions than older people, even aside from the three specific types of transition

we could measure with these data (see previous paragraph). But we also assume that the functions of age are not linear across the entire life-span.[15] So we created two dummy variables, one representing age under 35 years, and the second age 65 or older (in 1976). This in effect trichotomizes the sample into three life-cycle groups that should be progressively less likely to experience transitional constraints: younger, middle-aged, and older.

Self-constraints. Optimally, in a thorough study of self-constraints we would have a wide range of measures dealing with newspaper reading motivations, the absence of which would function as self-constraints. These would include the many kinds of involvement in political and community affairs that previous research has indicated correlate strongly with newspaper use. In secondary analysis of the CPS election studies, however, we are mostly limited to measures of political involvement, with an emphasis on the immediate election campaign.[16] While these measures represent only a subset of the potential bases for self-constraint, they are strong correlates not only of reading vs. non-reading, but also of adding vs. dropping the newspaper.[17] We created four scales, to represent campaign interest, campaign activity, attention to public affairs, and political activity outside the campaign context.

Campaign interest was the sum of two five-point scales, indicating how much the person cared about the election (1974) and how interested the person was in the campaign (1976). Campaign activity was a sum score for 1974 and 1976 combined, based on the person's report of four kinds of participation in the fall election campaign. Attention to public affairs was the sum of 1974 and 1976 self-reported general attention scores.[18] Political activity was a sum of scores based on reports in 1976 of six local and five national-level forms of political participation that were not specific to the election campaign context.[19]

Newspaper content use. Respondents who said they read a daily newspaper, which included the droppers in 1974 and the adders in 1976, were then asked the frequency with which they read various types of articles. To test our hypothesis that content

preferences within a medium would be a function of self-constraints, we created separate summed indices of the frequency of reading of "hard news" and "soft news."[20]

Plan for Analysis

On the basis of our theoretical model, we would expect the four readership groups to differ systematically on the basis of structural, transitional, and self-constraints. The most demanding test of this overall model would be a single multivariate analysis that examines differences among all four groups on all of our indicators of constraint. For this purpose we will use a multiple discriminant analysis to examine the dimensions of differentiation among the four groups.[21]

The indicators of self-constraint based on reading of "hard news" and "soft news" cannot be entered in this four-group analysis, because questions about newspaper reading were not asked of those who said they did not read a daily paper. Specific analyses of these measures will be performed separately from the main analysis, for those groups that were asked questions about different kinds of newspaper content.

Operationally, our hypotheses predict that stable non-readers will be much more constrained than other groups by the structural factors, education and income. The two unstable groups should be more subject than the two stable groups are to transitional constraints, including changes in residential, occupational, and marital status as well as the more global indicator of being in the youthful phase of the life cycle.

Self-constraints should, following our model in Figure 1, be empirically associated with structural constraints, to which they are partially attributable. Theoretically, however, we view self-constraints as determining use of the newspaper among those who are not structurally constrained. Measures of political involvement, and associated reading of "hard" news, should be important factors among people who are

readers at a given time, differentiating the self-constrained droppers from stable readers and adders. We would not predict differences among these three groups in consumption of "soft" news, to which politically oriented self-constraints would not apply. Somewhat more generally, we see self-constraints as determining the amount and kinds of newspaper content one reads, whereas structural and transitional constraints have more to do with whether one reads a newspaper at all.

Our emphasis on constraints that limit newspaper reading implies that we do not assume that competition from other mass media is a major explanatory factor. This accords with recent research that stresses the complementary, rather than competitive role of media in people's lives.[22] We do assume, though, that constraints of the types we have outlined could operate on use of other media besides the newspaper. After we have tested our model specifically in the domain of newspaper reading, we will explore its extension to television, radio, and magazine use.

Results

Descriptive statistics for each of the indicators of constraints are shown for the four groups in Table 2. No univariate tests of group differences are reported in Table 2, because our hypotheses predict complex multivariate patterns of group differences rather than simply predicting that the groups will differ on a particular variable. Because of the large sample size, the groups do indeed differ significantly on almost all of the variables shown in Table 2.

Table 2 about here

Multiple Discriminant Analysis

All of the variables that appear in Table 2 have been entered in the multiple discriminant analysis, the results of which are shown in Table 3. Of the three possible functions that could discriminate among the four groups, two are statistically

Table 2. Indicators of Constraint, by Reading Group

(Entries are means, with standard deviations in parentheses)

Measure (year measured)	Non-readers	Droppers	Adders	Readers
Education (1976)	3.74 (2.69)	5.23 (2.22)	5.00 (2.44)	5.79 (2.54)
Income (1976)	8.21 (5.71)	11.00 (5.56)	10.89 (5.44)	12.66 (5.58)
Age (1976)	50.05 (18.29)	41.26 (19.05)	40.64 (17.83)	50.22 (16.35)
Changed residence (1974 to 1976)	.08 (.27)	.11 (.31)	.13 (.34)	.07 (.26)
Changed marital status (1974 to 1976)	.09 (.29)	.21 (.41)	.11 (.32)	.07 (.26)
Changed employment status (1974 to 1976)	.22 (.41)	.35 (.48)	.24 (.43)	.21 (.40)
Attention to public affairs (1974 + 1976)	5.37 (1.92)	5.39 (1.83)	5.77 (1.70)	6.55 (1.49)
Political activity (1976)	.76 (1.32)	1.15 (1.68)	1.42 (1.79)	1.65 (1.97)
Campaign interest (1974 + 1976)	5.46 (2.20)	5.29 (1.97)	5.82 (2.14)	6.55 (1.84)
Campaign activity (1974 + 1976)	.65 (1.34)	.59 (.98)	1.13 (1.66)	1.37 (1.76)
(Group N)	(N=214)	(N=90)	(N=66)	(N=726)

significant.[23] Table 3 describes each function in terms of two different coefficients. The first (Table 3.1) is the zero-order correlation between each variable and each function, rotated using a varimax criterion. Variables are listed in the table according to the function with which each correlates most strongly, and the strength of that correlation. The second set of coefficients (Table 3.2) shows standardized discriminant functions (also varimax rotation), the interpretation of which is analogous to that of beta weights in multiple regression. In Table 3.1 the largest correlation for each variable by function has been outlined by a box to facilitate interpretation.

Table 3 about here

The significant first two functions lend rather strong support to our conceptual distinction between structural and transitional constraints. Function 1 can be interpreted as a combined structural/self-constraints dimension, with education a very important factor and income a secondary one. The political involvement measures indicating self-constraints also correlate with Function 1, although they are not so specific to that function as are education and income. This correlation of self-constraints with the antecedent structural constraints was expected (Figure 1). The standardized discriminant function coefficients (Table 3.2) for the political involvement measures are not nearly so strong for Function 1 as are the correlations (Table 3.1); this indicates that much of the commonality between Function 1 and self-constraints is accounted for by education and income, which is controlled in Table 3.2. As one might expect of a factor so pervasive as we have suggested structural constraints are, Function 1 explains the largest proportion of the total variance (16%) among the four groups.

The second significant function seems to represent transitional constraints, or at least those associated with youth and mobility. The strongest component in Function 2 is the dummy variable representing the early years of the adult life cycle (age under 35). Change in residence, a transition that almost inevitably disrupts

Table 3. Summary of Discriminant Function Analysis of Reading Groups

Table 3.1

Rotated correlations with function for each discriminating variable:

	Function 1	Function 2	Function 3
Education	.84[a]	.16	-.21
Attention to public affairs	.63	-.10	.38
Political activity	.48	.25	.17
Campaign interest	.46	-.06	.45
Income	.28	.03	-.06
Age under 35 (dummy variable)	.02	.92[a]	-.22
Age 65 and older (dummy variable)	-.21	-.38	.13
Changed residence	.01	.36	.07
Changed marital status	.04	.07	-.60[a]
Campaign activity	.37	.23	.47
Changed employment status	.05	.06	-.42

Table 3.2

Rotated standardized discriminant function coefficients:

Education	.72	-.23	-.44
Attention to public affairs	.36	-.10	.20
Political activity	.09	.16	.00
Campaign interest	.11	.04	.23
Income	.26	.08	.05
Age under 35 (dummy variable)	-.13	.89	-.01
Age 65 and older (dummy variable)	-.04	-.12	.01
Changed residence	-.01	.20	.21
Changed marital status	.03	-.04	-.58
Campaign activity	-.00	.24	.45
Changed employment status	.09	-.02	-.37
Canonical Correlation	.41 ($p<.001$)	.20 ($p<.001$)	.11 (n.s.)
Eigenvalue	.20	.04	.01

[a] Boxed numbers indicate the highest coefficient in each row of Table 3.1

newspaper subscription, is a factor of secondary importance in Function 2. This function accounts for 4% of the total variance among groups.

Although not statistically significant, Function 3 suggests that two other transitional factors, change in marital or employment status, could have distinctive effects on newspaper reading. These two life-cycle transitions, while strongly associated with the third function, are virtually unrelated to the first two functions. Several self-constraint indicators, notably those specific to the election campaign, are also associated with Function 3. This might mean that changes in employment and marital status are transitional constraints that lead immediately to self-constraints such as depressed political involvement. These transitions, which often involve leaving married or employed status, are not especially associated with any one age group. Such interpretations are quite speculative, however; we should not make much of a non-significant dimension.

Table 4 and Figure 2 about here

The mean for each reading group on each function (group centroids) is shown in Table 4; the entries in this table are standard scores. As predicted, the first function, representing structural and self-constraints, mainly discriminates between the non-readers and the other three groups. The stable readers are also somewhat higher on Function 1 than are the two unstable groups, adders and droppers. The second function, which mainly involves life-cycle transitional constraints, discriminates as hypothesized between the unstable groups (adders and droppers) and the stable ones (readers and non-readers). Figure 2 shows the locations of the group centroids on the two significant dimensions, Functions 1 and 2.

It is interesting to note in Table 4 that the non-significant Function 3 discriminates the droppers from the other three groups. This could mean that dropping the newspaper is specifically associated with people who are uninterested or inactive in politics undergoing changes in their marital or employment status. The lack of

Table 4. Canonical discriminant function centroids of the four groups

	Function 1	Function 2	Function 3
Non-readers	-.75	+.02	-.08
Droppers	-.28	+.41	-.71
Adders	-.27	+.55	-.09
Readers	+.28	-.11	+.10

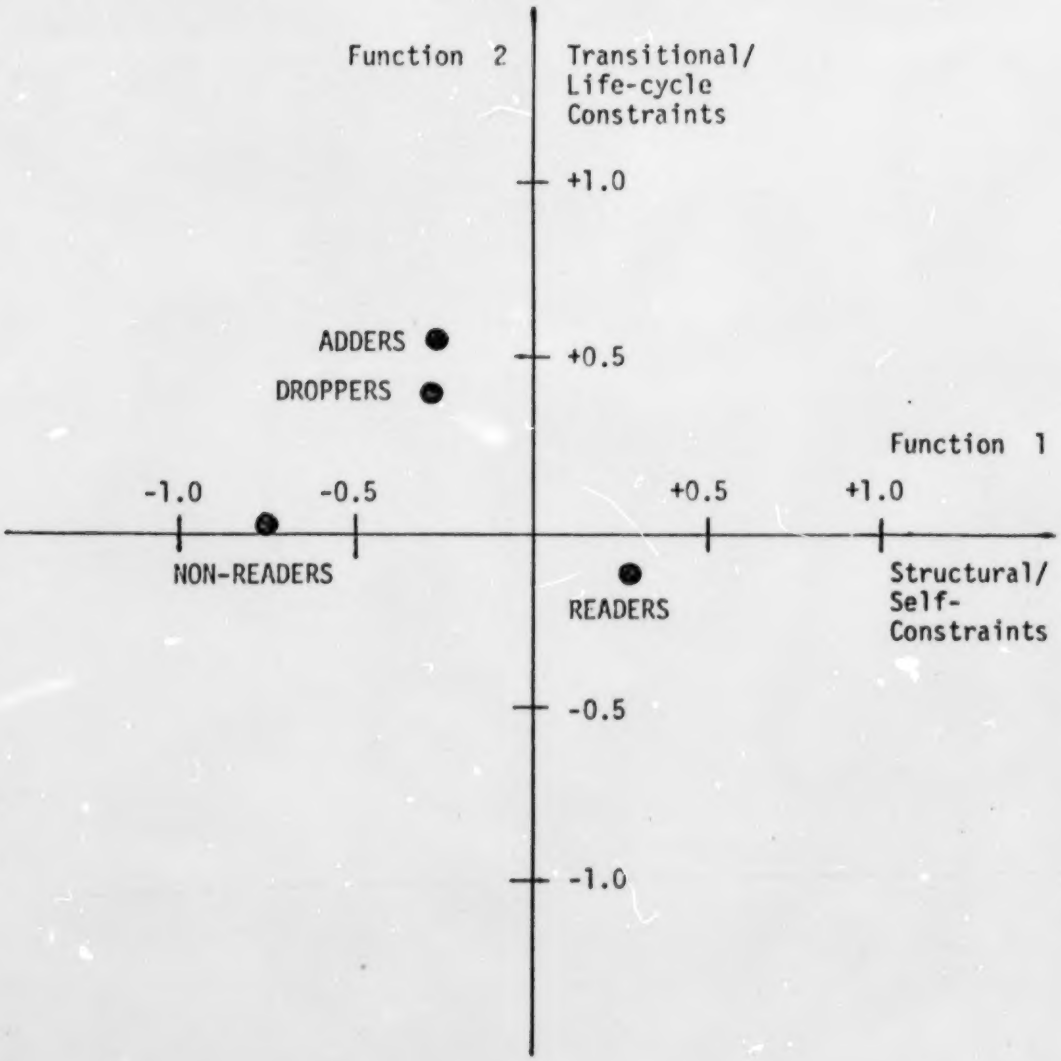

Figure 2. Readership Group Means on Two Constraint Dimensions

Note. Data are from Table 4.

significance of Function 3 could in part be due to the small number of droppers in this sample, in which they are under-represented due to differential attrition from the panel.

The operation of self-constraints, which are associated empirically with the prior structural and transitional constraints, does not emerge clearly from the multiple discriminant analysis. To examine self-constraints separately, we turn to consideration of the groups that were reading newspapers at a given time and can therefore be assumed not to have been especially constrained either structurally or transitionally.

Reading Soft vs. Hard News

Central to consideration of self-constraints as determinants of newspaper use is the question of what kinds of news the person reads. To the extent that self-constraints operate on news selection within the newspaper, they should reduce the frequency of reading "hard news" stories concerning public affairs and politics, but should not affect reading of other kinds of content, which for simplicity here we lump together as "soft news." The net effect of self-constraints overall, then, would be to reduce a person's total use of the newspaper.

Table 5 about here

Our main interest is in the interaction between type of reader and type of news read. The model predicts such an interaction when comparing droppers to readers but not when comparing adders to readers, because only droppers should be self-constrained. Treating hard vs. soft news content as repeated measures in analysis of variance provides us a sensitive test of this interaction.

Table 5 compares the hard and soft news reading in 1974 of the two groups that reported daily newspaper reading at that time, the stable readers and the droppers. The group-by-content interaction is significant, and consistent with our prediction in that the hard news score for droppers is much lower than any of the other cell means. There is also a significant group difference, the stable readers reporting

Table 5. Reading of Soft and Hard News, Stable Readers vs. Droppers 1974

(Cell entries are means)	Droppers	Stable Readers	Unweighted row mean
Soft news reading	9.06	9.68	9.37
Hard news reading	8.26	9.81	9.04
Column mean	8.66	9.75	9.20

Analysis of variance:

Source of variance	SSq	df	MS	F	p
Groups (G): Droppers vs. Readers	142.9	1	142.9	33.02	.001
Between-Subjects error term	3418.9	790	4.3		
Content (C): Soft vs. Hard	13.6	1	13.6	5.11	.02
C x G Interaction	26.5	1	26.5	10.01	.002
Within-Subjects error term	2094.2	790	2.7		

more frequent reading of both types of news. Table 5 further shows a significant main effect of content, the mean for soft news being somewhat higher than for hard news due to low hard-news reading among the droppers. This content "effect" should be considered an artifact of the significant interaction.

Table 6 about here

By contrast, there is no group-by-content interaction in Table 6, where the 1976 figures for the same measures are analyzed for the two groups who reported reading newspapers in 1976, adders and stable readers. The stable readers are significantly more frequent readers of all types of news stories than are the adders, as was the case for the reader-dropper comparison in Table 5. But, as we hypothesized, there is no tendency for either group to exhibit self-constraints that would specifically reduce hard-news reading. Table 6 shows no difference between hard and soft news reading overall, nor within either group.

Figure 3 about here

The adders and droppers cannot be compared directly in hard vs. soft news reading, because their content-specific measures had to be taken in different years. We can, however, compare these two groups relative to the stable readers, in terms of standard scores. These comparisons are shown in Figure 3, where the means from Tables 5 and 6 are plotted as deviations from the overall mean in each year. The droppers, whose discontinuance of newspaper reading was hypothesized to be a function of self-constraints, clearly diverge from the other groups by their low consumption of hard news content. Otherwise, Figure 3 shows little difference in reading of the two types of content, stable readers simply being consistently more frequent consumers than the two unstable reader groups.

Table 6. Reading of Soft and Hard News, Stable Readers vs. Adders 1976

(Cell entries are means)	Adders	Stable Readers	Unweighted row mean
Soft news reading	8.60	9.42	9.01
Hard news reading	8.73	9.56	9.15
Column mean	8.66	9.49	9.08

Analysis of variance:

Source of variance	SSq	df	MS	F	p
Groups (G): Adders vs. Readers	109.2	1	109.2	24.95	.001
Between-Subjects error term	3562.4	814	4.4		
Content (C): Soft vs. Hard	3.0	1	3.0	1.00	n.s.
C x G Interaction	0.0	1	0.0	.00	n.s.
Within-Subjects error term	2476.4	814	3.0		

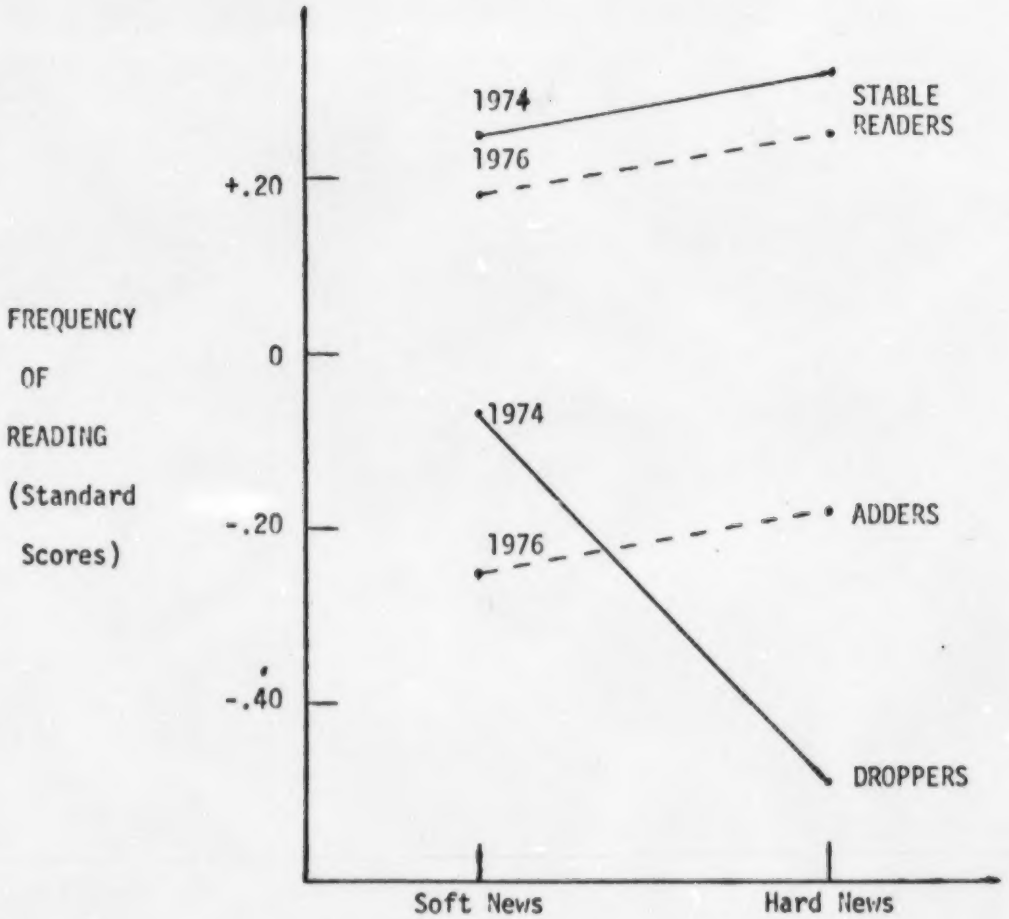

Figure 3. Newspaper Content Reading, by Readership Group

Note. Standard scores for this graph have been calculated by scoring the group means in Tables 5 and 6 as deviations from the overall means, and then dividing by the overall standard deviation for that table.

Summary

Overall, our constraints model has held up quite well under empirical test. As we predicted, structural constraints account for stable non-reading. Transitional constraints, particularly those associated with youth and mobility, predict changes in readership status, non-directionally. Directional changes, as represented by the adders and droppers, are associated mainly with indicators of self-constraint, based on lack of interest and involvement in the kinds of political affairs that are heavily covered by newspapers. The data are also consistent with our expectation that self-constraints would be a function of structural factors, which are the most pervasive constraints determining readership status.

Further Explorations: Other Media

While our study is specifically addressed to newspaper reading, two quite different perspectives might lead to consideration of use of other media. One is a media-competition model, in which rival media are seen as drawing away newspaper readers by providing functionally equivalent content at less cost and inconvenience.[24] This model is in effect a theoretical rival to our constraints approach as an explanation of readership status. A contrasting viewpoint would be to assume that our constraints model, being so applicable to newspaper reading, might further help to explain variation in use of other media as well.

The media-competition model would call for examination of consumption of other mass media by the four readership groups, pursuing hypotheses such as the prediction that droppers would be especially attracted to news content in rival media. Extension of the constraints model, on the other hand, would call for examination of changes over time in use of other media in an analysis parallel to that which we have presented (above) regarding newspaper use. We do not consider either of these lines of inquiry very promising, and at best the data available to us for secondary analysis are not rich enough with respect to other media to pursue either approach very far. What we can do here is to consider theoretically those other modes of communication for which we have at least some data, and then to check the results for consistency with our reasoning.

As noted earlier, current theory does not give much credence to the media-competition model. The news media seem more to be sharing than competing for their consumers. For example, those who read public affairs news in the newspapers are also more likely to consume similar content via television, radio, and magazines as well.[25]

Our concept of self-constraints would account for this finding in a negative way, predicting that those who are self-constrained will pay less attention to public affairs content regardless of the medium by which it is presented. Given the ubiquity of television and radio receivers in U.S. households, these broadcast media do not seem to be subject to much structural or transitional constraint, except in the rare case of someone who has, say, suddenly lost his job and can't afford to have his TV set repaired. Data on media consumption in poverty-level households indicate that TV and radio are among the few amenities that even the very disadvantaged American family is most inclined to maintain for itself.[26]

The constraints model, then, does not promise to account for much variation in use of broadcast media. The kinds of self-constraints we have focused upon should predict differences in listening to radio and TV public affairs content specifically, but not entertainment programs.

Some other media are subject to structural and transitional constraints, however. A notable case is the news magazine, which is rather similar to the newspaper in several key respects: requiring cognitive skills, typically received via home subscription, and heavily laden with public affairs content. Accordingly, we would make approximately the same predictions for news magazines as for newspaper readership. Structural constraints should be associated with stable non-reading, youth and mobility with unstable readership, and self-constraints with lesser attention to current political news

Several measures in the CPS data set could be used to check the foregoing theoretical analysis. Measures of frequency of viewing television entertainment programs,

and attention to TV public affairs programs, were included in both the 1974 and 1976 questionnaires.[27] In the 1976 survey there were also questions about listening to radio programs about the campaign, and reading magazine articles about the campaign.[28] (Since these latter items were not asked in 1974, we cannot conduct longitudinal analyses such as sorting out magazine "adders" and "droppers.")

Table 7 about here

To facilitate comparisons across measures and years, Table 7 shows standard scores for each of our four readership groups on the other media indices.[29] Univariate F-tests, which indicate whether the readership groups differ significantly on the listed variable, are also shown in Table 7.

The four groups do not differ significantly in viewing of television entertainment programs, in either year. This finding coincides with our reasoning that none of the three forms of constraint would be associated with differences in entertainment content. From a media-competition perspective, it fails to support the popular belief that general entertainment on TV is drawing people away from the newspaper.

The media-competition model is even more directly refuted in Table 7 by the findings regarding public affairs and political content on TV and radio. Not only are the droppers markedly lower than the other groups, their viewing of public affairs television programing decreases during the period in which they discontinue reading a newspaper (1974 to 1976). Obviously they have not dropped the newspaper in favor of news from television, but due to self-constraints. They lack interest in public affairs news via any medium.

Our assertion that the structural constraints on non-readers would not apply to use of radio and TV gains some support from Table 7. The non-readers are no lower than the adders in consumption of broadcast public affairs content, and they are above the droppers on all such measures. Here we probably have a valid example of functional equivalence. Deterred from newspaper use by structural constraints, some stable non-readers are not self-constrained and they get their news instead from television and radio.

Table 7. Use of Other Media, by Newspaper Reading Group

(Cell entries are standard scores)

Media use measure	Year	Non-readers	Droppers	Adders	Readers	F
TV entertainment viewing	1974	.04	.08	-.06	-.06	.84
	1976	.07	.12	-.15	-.03	1.52
TV public affairs viewing	1974	-.02	-.09	-.07	.19	4.57**
	1976	-.05	-.15	-.11	.32	13.86***
Candidate debates viewing	1976	.00	-.18	.05	.14	3.08*
Radio campaign programs	1976	-.03	-.14	-.02	.19	4.64**
Magazine campaign articles	1976	-.25	-.10	-.06	.41	31.15***

* $p<.05$ ** $p<.01$ *** $p<.001$

Note. Standard scores for this table have been calculated by scoring each group mean as a deviation from the mean among the four groups, and then dividing the deviation score by the standard deviation for the total sample.

Magazine campaign news reading, shown in the final row of Table 7, is associated as we predicted with newspaper readership status. The structurally constrained non-readers of newspapers also tend strongly not to read about the campaign in magazines. The transitionally constrained droppers and adders are intermediate, and the self-constrained droppers are lower than the adders. This supports our that magazine news reading is more subject to the constraints that determine newspaper readership status than are other news media. A direct test of the constraints model on magazine use would, however, require longitudinal data which we do not have.

Overall this final set of analyses lends added support to our constraints approach and tends to contradict the media-competition model. People who discontinue newspaper reading lack interest in public affairs news; they are not being drawn to rival news media. Structural and transitional constraints apply specifically to newspapers and news magazines, not to the mass media in general. Broadcast media can provide a source of news that is not structurally constrained, for the audience member who is not self-constrained.

Discussion

A major implication of this study is the conclusion that lost newspaper readership, the industry's most vexing long-term problem, is not directly attributable to deficiencies in the newspaper itself. Newspapers of superior reportorial quality may earn somewhat higher net circulation figures.[30] But for many people, readership status is heavily constrained by factors beyond the control of the individual -- or of the newspaper. Social change, such as increased mobility or marital instability, may well be as important in determining the future of the newspaper in American life as will the press's performance in the media marketplace.

Attempts to maintain readership by making the newspaper more like television and other entertainment media seem misdirected. To judge from other research, television has improved its competitive edge versus the press by upgrading its public affairs programing, which is to say by becoming more like the newspaper.[31]

The main individual self-constraint on newspaper use that we have identified here has been a lack of interest in politics and public affairs. Ironically, the newspaper's traditional "watchdog" stance, which stresses the negative side of politics and government, may be inadvertently self-defeating by breeding a general cynicism toward the world of politics. It is noteworthy that the recent era of declining newspaper readership has seen a parallel decline in public confidence in political leaders and parties, governmental institutions, and democratic processes.[32]

We have attempted in this paper to establish a framework for more comprehensive studies designed to examine a wider range of structural, transitional, and self-constraint factors. We have focused on public affairs and politics, plus a few simple demographic variables, because those were the measures available from the national election studies. Research directed toward systematic analysis of newspaper reading in the context of structural barriers, life-cycle transitions and personal motivations would obviously go well beyond the few indicators we have studied here. The attractions of different kinds of newspaper content for specific sub-audiences, the role of other media, and the place of the newspaper in changing lifestyles can all be approached from a constraints perspective. A fuller understanding of transitional constraints would require more longitudinal studies, following people over periods longer than two years and with more than two waves of measurement so that temporary changes can be distinguished from relatively permanent ones.

Also deserving more exploration than has been possible here is the role of the emerging media of less universal use, such as specialized magazines and books, and "narrowcast" presentations for special audiences via film, radio, and cable television. Although a simple media-competition model does not appear to account for declining newspaper readership, new generations of young people coming of age in a world of expanding media choice are distinctly less likely than their predecessors

to adopt newspaper reading as a part of daily life. Socialization to media habits deserves much more careful research attention as new communication technologies proliferate and structural constraints recede.

Footnotes

1. John P. Robinson and Leo W. Jeffres, "The Changing Role of Newspapers in the Age of Television," Journalism Monographs No. 63 (September, 1979), pp. 2-3.

2. Among the earliest quantitative studies of mass communication phenomena were readership surveys, such as George Gallup, "A Scientific Method for Determining Reader Interest," Journalism Quarterly, 7: 1-13 (March, 1930); Ralph O. Nafziger, "A Reader-Interest Survey of Madison, Wisconsin," Journalism Quarterly, 7: 128-141 (June, 1930).

3. In a comprehensive review of research since 1950, McCombs found more than fifty studies that specifically compare readers to non-readers. Maxwell McCombs, "Newspaper Readership and Circulation," ANPA News Research Report No. 3 (May, 1977). Prominent studies include Wilbur Schramm and David Manning White, "Age, Education, Economic Status: Factors in Newspaper Reading," Journalism Quarterly, 26: 149-159 (June, 1949). Merrill Samuelson, Richard F. Carter and Lee Ruggels, "Education, Available Time, and Use of Mass Media," Journalism Quarterly, 40: 491-496, 617 (Autumn, 1963). Bruce H. Westley and Werner J. Severin, "A Profile of the Daily Newspaper Non-Reader," Journalism Quarterly, 41: 45-50, 156 (Winter, 1964). Jeanne Penrose, David H. Weaver, Richard R. Cole and Donald Lewis Shaw, "The Newspaper Nonreader 10 Years Later: A Partial Replication of Westley-Severin," Journalism Quarterly, 51: 631-638 (Winter, 1974). Subsequent research includes Paula M. Poindexter, "Non-Readers: Why They Don't Read," ANPA News Research Report No. 9 (January, 1978). Jack M. McLeod and Sun Yuel Choe, "An Analysis of Five Factors Affecting Newspaper Circulation," ANPA News Research Report No. 10 (March, 1978). John P. Robinson, "Daily News Habits of the American Public," ANPA News Research Report No. 15 (September, 1978).

4. Wilbur Schramm, Jack Lyle and Edwin B. Parker, "Patterns in Children's Reading of Newspapers," Journalism Quarterly, 37: 35-40 (Winter, 1960). Peter Clarke, "Parental Socialization Values and Children's Newspaper Reading," Journalism Quarterly, 42: 539-546 (Autumn, 1965). Steven H. Chaffee, Jack M. McLeod and Charles K. Atkin, "Parental Influences on Adolescent Media Use," American Behavioral Scientist, 14: 323-340 (Jan./Feb., 1971). Mary Benedict, David H. Weaver and J. Herbert Altschull, "High School Students and the Newspaper: Educating Media Consumers," Journalism Quarterly, 53: 280-286 (Summer, 1976). Jack M. McLeod and Garrett J. O'Keefe Jr., "The Socialization Perspective and Communication Behavior," in F. Gerald Kline and Phillip J. Tichenor (eds.), Current Perspectives in Mass Communication Research (Beverly Hills: Sage, 1972), pp. 121-168.

5. Steven H. Chaffee, Marilyn Jackson-Beeck, Jean Durall and Donna Wilson, "Mass Communication in Political Socialization," in Stanley Renshon (ed.), Handbook of Political Communication (New York: Free Press, 1977), pp. 223-258.

6. Leonard P. Tipton, "ANPA Newspaper Readership Studies," ANPA News Research Report No. 13 (July, 1978).

7. From 1940 to 1970, the median education of adult Americans rose from 8.6 years to 12.2 years, and the percentage of high school graduates in the adult population grew from 57.4% to 75.6%. Bureau of the Census, Historical Statistics of the United States (Washington: U.S. Government Printing Office, 1975).

8. Recent UNESCO figures list nine countries in Africa with no daily newspapers, and in ten Asian and Middle Eastern countries newspaper circulation is less than 20 per 1,000 population. In most Latin American countries the figure is below 100 circulation per 1,000 population, ranging from 27 in Guatemala to 269 in Uruguay. World Communication (New York: UNESCO, 1975).

9. Keith R. Stamm, Kenneth M. Jackson and Lawrence Bowen, "Newspaper Use Among New Residents," ANPA News Research Report No. 6 (October, 1977).

10. Lowndes F. Stephens, "The Influence of Community Attachment on Newspaper Reading Habits," ANPA News Research Report No. 17 (December, 1978). McLeod and Choe, op.cit., fn. 3.

11. Much recent motivational work has focused on positive attractions based on the "gratifications" provided by media "uses." These studies have frequently dealt with political topics, often in election settings. Examples are Jack M. McLeod and Lee B. Becker, "Testing the Validity of Gratifications Measures Through Political Effects Analysis," in Jay G. Blumler and Elihu Katz (eds.), The Uses of Mass Communication (Beverly Hills: Sage, 1974), pp. 137-164. Lee B. Becker, "Two Tests of Media Gratifications: Watergate and the 1974 Election," Journalism Quarterly, 53: 28-33, 87 (Spring, 1976). Steven H. Chaffee and Fausto Izcaray, "Mass Communication Functions in a Media-Rich Developing Society," Communication Research, 2: 367-395 (October, 1975).

12. Sidney Verba and Norman H. Nie, Participation in America (New York: Harper and Row, 1972). Richard L. Allen and Steven H. Chaffee, "Mass Communication and the Political Participation of Black Americans," Communication Yearbook 3 (New Brunswick, N.J.: Transaction Books, 1979), pp. 507-522.

13. Warren E. Miller, Arthur H. Miller and F. Gerald Kline, The CPS 1974 American National Election Study (Ann Arbor: Inter-University Consortium for Political and Social Research, 1975). Warren E. Miller and Arthur H. Miller, The CPS 1976 American National Election Study (Ann Arbor: Inter-University Consortium for Political and Social Research, 1977).

14. The CPS 1974-1976 panel is not as accurate a representation of the U.S. adult population as would be either of the cross-sectional samples drawn in 1974 and 1976. Attrition from a panel over time is non-random, with people who move from one residence to another being particularly likely to drop out. One consequence of this is that the percentage of newspaper readers would appear from Table 1 to have increased, from 72% in 1974 to 74% in 1976. The more representative cross-sectional data indicate otherwise, however; in the full 1974 sample 73% were newspaper readers, but in 1976 this figure had dropped to 71%. These figures are similar to those reported by other national survey agencies, cited in Robinson and Jeffres, op.cit., fn. 1. To judge from the care with which CPS sampling and interviewing are conducted, and from the small deviation (±2%) of the panel data from the cross-sectional waves, the droppers and adders in this panel can probably be taken as reasonably representative of the much larger populations of newspaper droppers and adders nationwide.

15. Steven H. Chaffee and Donna Wilson, "Adult Life-Cycle Changes in Mass Media Use," presented to Assn. for Education in Journalism, Ottawa, Canada, August 1975.

16. Some questions were asked in 1974 only of those who first said they read a daily newspaper, whereas in 1976 these questions were asked of all respondents. Other questions were asked in only one year, or were asked with different wording or in different questionnaire contexts. These variations introduce some minor elements of non-comparability into our data analysis.

17. Steven H. Chaffee, "Political Involvement and Newspaper Reading," presented to Assn. for Education in Journalism, Houston, Texas, August 1979.

18. Campaign activity items were attending a political rally or meeting; working for a candidate or party; displaying a campaign button or bumper sticker; and trying to influence someone else to vote for a candidate. The attention measure was, "Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?"

19. The items included writing a letter to the editor on a local, or national, problem; joining an organization working on a local, or national, problem; joining in a demonstration regarding a local, or national, problem; signing a petition on a local, or national problem; contacting a local or national public official; and attending a city council or school board meeting.

20. "Hard news" consisted of stories about international news, national politics, and state and local politics. "Soft news" consisted of stories about people in the community, home and garden, and crime and accidents. Responses were scored 1=never, 2=rarely, 3=sometimes and 4=frequently, in response to the question, "how often do you read newspaper stories about . . .?" The means Tables 5 and 6 represent the summed scores across the three items for each index.

21. Although Figure 1 may appear to lend itself to testing by path analysis or other multiple regression models, the dependent variable (readership status) is a typology rather than a single dimension of variation.

22. Robinson and Jeffres, op.cit., fn. 1, pp. 18-20. Tipton, op.cit., fn. 6.

23. These functions are derived by a procedure in which the first function separates the four groups as much as possible; given this separation, the second function separates them as much as possible in a direction orthogonal to the first function; then the third function provides maximal separation in another orthogonal direction. This makes the four groups as distinct as possible, in terms of the original discriminating variables entered.

24. Melvin L. DeFleur and Sandra Ball-Rokeach, Theories of Mass Communication, Third Edition (New York: Longman, 1975), Ch. 2. Walter Weiss, "Effects of the Mass Media of Communication," in Gardner Lindzey and Elliot Aronson (eds.), Handbook of Social Psychology, Vol. 5 (Reading, Mass.: Addison-Wesley, 1967). Leo Bogart, "Newspapers in the Age of Television," Daedalus, 92: 116-127 (1963). Leo Bogart, "How the Challenge of Television News Affects the Prosperity of Daily Newspapers," Journalism Quarterly, 52: 403-410 (Autumn, 1975).

25. See footnote 22.

26. Brenda Dervin and Bradley S. Greenberg, "The Communication Environment of the Urban Poor," in F. Gerald Kline and Phillip J. Tichenor (eds.), Current Perspectives in Mass Communication Research (Beverly Hills: Sage, 1972).

27. Television entertainment viewing for both years consisted of summed scores for watching daytime and evening entertainment programs. Public affairs TV in 1974 was the sum of frequencies for watching morning national news, early evening local news, early evening national news, and late evening local news. In 1976 the public affairs TV measure was the sum for early evening national news and late evening local news.

28. "We're interested in this interview in finding out whether people paid much attention to the election campaign this year. Take radio for instance -- did you listen to any speeches or discussions about the campaign on the radio? (If yes) How many programs about the campaign did you listen to on the radio -- a good many, several, or just one or two?" "How about magazines -- did you read about the campaign in any magazines? (If yes) How many magazine articles about the campaign would you say you read -- a good many, several, or just one or two?"

29. Table 7 does not directly relate measures of constraints to measures of media use, as we have done in our multiple discriminant analysis of readership groups. Instead in Table 7 these readership groups are used in turn as rough locators of the theorized constraints that account for them. This permits simultaneous consideration of both the constraints and the media competition model, but would clearly not be the optimal approach for evaluating the constraints approach alone.

30. Bogart (1975), op.cit., fn. 24.

31. Robinson and Jeffres, op.cit., fn. 1.

32. Arthur H. Miller, "Political Issues and Trust in Government: 1964-1970," American Political Science Review, 68: 951-972 (1974). Norman H. Nie, Sidney Verba and John R. Petrocik, The Changing American Voter (Cambridge: Harvard University Press, 1976), pp. 47-73.